

REMARKS/ARGUMENTS

Favorable reconsideration of this application, in view of the present amendment and in light of the following discussion, is respectfully requested.

Claims 55-79 are currently pending in this application. Claims 66, 67, 69, 75, and 77 are amended by the present amendment and Claims 55-65, 68, 70, 72, 74, 76, and 78 were withdrawn by a previous response.

In the outstanding Office Action, Claims 66, 67, 71, 75, and 77 were rejected under 35 U.S.C. §102(e) as anticipated by Suga (U.S. Patent 6,378,858); Claim 73 was rejected under 35 U.S.C. §103(a) as unpatentable over Suga; and Claims 69 and 79 were indicated as including allowable subject matter.

This amendment is submitted in accordance with 37 C.F.R. §1.116 which after final rejection permits entering of amendments canceling claims, complying with any requirement of form expressly set forth in a previous Office Action, or presenting rejected claims in better form for consideration on appeal. The present amendment amends the claims to place them in better form for appeal and includes subject matter which was earlier presented. It is therefore respectfully requested that the present amendment be entered under 37 C.F.R. §1.116.

Applicant appreciatively acknowledges the indication of allowable subject matter. However, Claims 69 and 79 are presently maintained in dependent form because Applicant believes that Claim 67, from which Claims 69 and 79 depend, includes allowable subject matter.

In response to the rejections of Claims 66, 67, 71, 73, 75, and 77, Applicant respectfully submits that independent Claims 66, 67, 75, and 77 state novel features clearly not taught or rendered obvious by the applied reference.

Specifically, independent Claim 66 recites, in part, an image forming apparatus comprising:

...a sheet feeding device configured to convey the sheet to said image forming device, said sheet feeding device includes an axis, a driving gear configured to rotate said axis and support said axis at one side thereof, a gear engaged with said driving gear, a feed roller, and a ***separation member configured to be pressed against said feed roller at a pressure applied between said feed roller and said separation member***; and
a pressing device configured to ***change the pressure while the sheet is conveyed between said feed roller and said separation member*** such that a plurality of sheets conveyed between said feed roller and said separation member are separated and individually conveyed to said image forming device...

As described, in an exemplary non-limiting embodiment at page 12, line 21, through page 13, line 16, with corresponding Figure 17 of the originally filed specification, an advantageous effect of loosening the sheets of paper fed between the feed roller and the separation member is obtained using a pressing cycle of a low frequency, several hundred Hz for example, ***while feeding the paper*** between the feed roller and separation member. Thus, as recited in independent Claims 66, the pressing device is configured to ***change the pressure while the sheet is conveyed between said feed roller and said separation member***. Independent Claims 67, 75, and 77, while directed to alternate embodiments, recite similar limitations to Claim 66. Thus, the following discussion, while directed to Claim 66, also applies to Claims 67, 75, and 77.

Turning to the applied reference, Suga describes a sheet feeding apparatus that includes a sheet feeding roller 51, a separation roller 53, and a pressure switching cam portion 80f for switching the pressure of the separation roller 53 against the sheet feeding roller 51.¹ Suga describes that the pressure switching cam portion 80f rotates such that the pressure switching cam follower 93 causes the spring receiver 91 to apply a first (lower) pressure P1 or a second (higher) pressure P2 to the separation roller 53, which in turn applies

¹ See Suga, at column 8, lines 1-19.

the pressure to the sheet feeding roller 51.² However, it is respectfully submitted that while the sheet feeding roller 51 *is rotating*, the separation roller 53 is *only applying a constant pressure* (the higher pressure P2), and is *not applying a changing pressure*, as discussed below.

Suga describes controlling the operations of the sheet feeding roller 51, an intermediate plate 70, and the pressure Pr of the separation roller 53 from column 9, line 50, through column 11, line 56, with corresponding Figures 4(a) through 7(g). The separation roller 53 is driven in a direction *opposite* to the sheet feeding-conveying direction, and thus does not feed a top sheet S, but instead serves to ensure that any extra sheets that are fed with the top sheet S are returned to an initial position and not fed in the sheet feeding-conveying direction.³ As shown in Figures 6(b) through 6(d), while the sheet feeding roller 51 is moving a sheet S during a pre-feeding operation, the pressure Pr is *applied constantly* at the second pressure P2, and is not changing.⁴ Suga next describes that when the pre-feeding operation is complete, the sheet feeding roller 51 is temporarily stopped.⁵ Therefore, during the entire pre-feeding operation, the pressure Pr is *applied constantly* at the second pressure P2 *while the sheet feeding roller 51 is moving* a sheet S.

The outstanding Office Action states on page 4 that the Examiner disagrees with Applicant's assertion that the spring receiver stays pressing at the higher pressure while the feed roller is feeding the sheet. The Office Action also states that, at least as shown in Figures 7(f) and 7(g), the sheet is conveyed between the feed roller and the separation member and the pressure is varied from P2 to P1, and further that the separation roller in Figure 7(f) and 7(g) is continuing to rotate to separate sheets. However, it is respectfully submitted that the separation roller 53 described in Suga does not *feed* sheets, as described

² See Suga, at column 9, lines 2-20.

³ See Suga, at column 7, lines 21-25.

⁴ See Suga, at column 10, lines 19-57, with corresponding Figures 6(b) – 6(d).

⁵ See Suga, at column 10, line 66, through column 11, line 10, with corresponding Figure 6(d).

above. Further, as described next, it is respectfully submitted that the *sheet feeding roller 51 is not rotating*, and therefore *a sheet is not being fed*, when the pressure is changed.

After the pre-feeding operation is complete, Suga describes that while the sheet feeding roller 51 *is stopped*, the pressure switching cam portion 80f is switched to the separation portion and the pressure P_r of the separation roller is switched to the lower pressure P_1 .⁶ Then, Suga describes, the driving gear 80 is further rotated to a position θ_5 , and the pressure P_r of the separation roller 53 is returned to the higher value P_2 .⁷ When the driving gear 80 reaches position θ_5 , the pressure P_r is at the higher value P_2 and the sheet feeding roller 51 is *not yet rotating*.⁸ Thus, the sheet S is *not being conveyed* while the pressure P_r changes. Next, the sheet feeding roller 51 is rotated through angle B° while the pressure P_r is at the higher value P_2 , and then the sheet feeding roller 51 is stopped.⁹ Therefore, *the sheet feeding roller 51 is only rotated while the pressure P_r applied by the separation roller 53 is at the higher value P_2* . Thus, it is respectfully submitted that Suga does not teach or suggest a pressing device that is configured to *change the pressure while the sheet is conveyed between said feed roller and said separation member*, as defined in Claim 66.

As discussed above, Suga does not teach or suggest the pressing device defined in Claim 66. Additionally, it is respectfully submitted that Suga does not teach or suggest the pressing device defined in Claims 67, 75, and 77. Thus, it is respectfully requested that the rejection of Claims 66, 67, 75, and 77 as anticipated by Suga be withdrawn. Further, as Claims 71 and 73 depend from Claim 67, in addition to reciting additional features not taught or suggested by Suga, it is respectfully requested that the rejections of Claims 71 and 73 be withdrawn.

⁶ See Suga, at column 11, lines 11-20, with corresponding Figure 7(e).

⁷ See Suga, at column 11, lines 21-24, with corresponding Figure 7(f).

⁸ See Suga, at column 11, lines 21-34, with corresponding Figure 7(f).

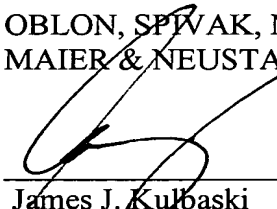
⁹ See Suga, at column 11, lines 21-34, with corresponding Figure 7(g).

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal allowance. A Notice of Allowance is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicant's undersigned representative at the below listed telephone number.

Respectfully submitted,

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